

Macdonald,P., Marguis,N., McEwan,P., McGurk,A., McKernan,K., McPheeeters,R., Meldrim,J., Meneus,L., Morrow,J., Naylor,J., Norman,C.H., O'Connor,T., O'Donnell,P., Oliver,T.M., Peterson,K., Pierre,N., Pisano,C., Polara,V., Raymond,C., Riley,R., Rothman,D., Roy,A., Santos,R., Severy,P., Spencer,B., Stange-Thomann,N., Stojanovic,N., Subramanian,A., Talamas,J., Tesfaye,S., Theodore,J., Turrell,A., Vassilieff,H., Viel,R., Vo,A., Wu,X., Wyman,D., Ye,W.J., Zimmer,A. and Zody,M.

**TITLE** Direct Submission  
**JOURNAL** Submitted (26-JAN-2000) Whitehead Institute/MIT Center for Genome Research, 320 Charles Street, Cambridge, MA 02141, USA  
**COMMENT** On Sep 10, 2000 this sequence version replaced g1:7107809.  
All repeats were identified using RepeatMasker:  
Smits, A.F.A. & Green, P. (1996-1997)  
<http://ftp.genome.washington.edu/RW/RepeatMasker.html>

**Center:** Whitehead Institute/ MIT Center for Genome Research  
**Center code:** WIBR  
**Web site:** <http://www-seq.wi.mit.edu>  
**Contact:** sequence.submissions@genome.wi.mit.edu  
**Project Information**  
**Center project name:** L2268  
**Center clone name:** 52\_G\_4

**Summary Statistics**

Sequencing vector: M13; M7815; 100% of reads  
Chemistry: Dye-terminator Big Dye; 100% of reads  
Assembly program: Phrap; version 0.960731  
Consensus quality: 150598 bases at least Q40  
Consensus quality: 156229 bases at least Q30  
Consensus quality: 158583 bases at least Q20  
Insert size: 188000; agarose-fp  
Insert size: 161309; sum-of-contigs  
Quality coverage: 3.7 in 020 bases; agarose-fp  
Quality coverage: 4.3 in 020 bases; sum-of-contigs

\* NOTE: This is a 'working draft' sequence. It currently consists of 12 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be preserved.

1 6777: contig of 6777 bp in length  
\* 6778 6877: gap of 100 bp  
\* 6878 8136: contig of 1259 bp in length  
\* 8137 8236: gap of 100 bp  
\* 8237 9996: contig of 1760 bp in length  
\* 9997 10097: gap of 100 bp  
\* 12553 12652: gap of 100 bp  
\* 12653 20026: contig of 7374 bp in length  
\* 20027 20126: gap of 100 bp  
\* 20127 27970: contig of 7844 bp in length  
\* 27971 28071: gap of 100 bp  
\* 36728 36827: gap of 100 bp  
\* 36828 36927: contig of 14145 bp in length  
\* 50993 51073: gap of 100 bp  
\* 51073 68989: contig of 17917 bp in length  
\* 68990 69089: gap of 100 bp  
\* 69090 91875: contig of 22786 bp in length  
\* 91876 91975: gap of 100 bp  
\* 91976 129030: contig of 37055 bp in length  
\* 129031 129130: gap of 100 bp  
\* 129131 162409: contig of 33279 bp in length.

## APPENDIX I

**BASE COUNT** 47426 **a** 31849 **c** 32034 **g** 49990 **t** 1110 others  
**ORIGIN**

Query Match 24.0% Score 80.6; DB 67; Length 162409;  
Best Local Similarity 77.7%; Pred. No. 1.6e-15; Matches 146; Conservative 0; Mismatches 37; Indels 5; Gaps 4;

Qy 2 GCTGCACTTTCATAGCTCCTCCCTGGGATATGGGAGATACAGAACCG 61  
Db 106888 GCTGCATCTTCTCTATCTCTCCCTCTGGGATAATGGGAGATACAGAACCG 106947

Qy 62 GACAGCTGTNTATGATGATGACTGGACGCCCTGGCNGTCAGTGAAGCCACCATATGTG 121  
Db 106948 GACAGCTCAT-TCTAAATGGACTGGACCCCTGACG-CTGATGAGCCACCATATG-TG 107004

Qy 122 NATCTATCAGCTCACCGGTGTGAGTGTAGNCTCAAGGAGAATAGGGAGCT 181  
Db 107005 GATCTCATGCT-TCACCCATGTTACAGTGTAGCTCAAAGTAACCAAGCTCTCTGT 107062

Qy 182 TCTCTGAG 189  
Db 107063 GAGGGAG 107070

RESULT	3
HSNPG	
LOCUS	HSNPG
DEFINITION	H.sapiens mRNA NP_000001
ACCESSION	X05882 S61557
VERSION	X05882.1 GI:35016
KEYWORDS	NDP gene.
SOURCE	human.
ORGANISM	Homo sapiens
	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

**FEATURES**

Source	Location/Qualifiers	Value
1. 162409	/organism="Homo sapiens"	
/db_xref="taxon:9606"		
/chromosome="4"		
/map="4"		
/clone="RP11-52G4"		

REFERENCE 2 (bases 1 to 1846)  
AUTHORS Chen,Z.  
TITLE Direct Submission  
JOURNAL Submitted (28-APR-1992) Z. Chen, University of Oxford, Genetics Lab/Dept of Biochemistry, South Parks Road, Oxford OX1 3QU, UK  
REFERENCE 2 (bases 1 to 1846)  
AUTHORS Chen,Z.Y., Hendrie,R.W., Jobling,M.A., Powell,J.F., Breakfield,X.O., Sims,K.B. and Craig,I.W.

TITLE	Isolation and characterization of a candidate gene for Norrie disease
JOURNAL	Nat. Genet. 1 (3), 204-208 (1992)
MEDLINE	93265104
FEATURES	Location/Qualifiers
SOURCE	1. 1846 organism="Homo sapiens" /db_xref="taxon:9606" /chromosome="X"; /dev_stage="fetal"; /tissue_type="retina"; /clone_lib="fetal retina CDNA"; /clone="FR2, FR7"; 85. .92 gene_start=1 gene_id="NDPP" 409. .810 /note="cDNA for Norrie Disease" /codon_start=1 protein_id="CAA46713.1" /db_xref="GI:35017" /ab_xref="SWISS-PROT:Q00604" /translation="MRKVHLASFLRQGKSCASRPLVSPSTVLKQPFRSSCHCRRPQISK VDSISHLRLKKSKMVLARDEGHCSMSLIVMDTSDPSDPRCMRHY KLALRURCGSGMRLATTRYILSCHCEBCNS" /transliteration="MRKVHLASFLRQGKSCASRPLVSPSTVLKQPFRSSCHCRRPQISK VDSISHLRLKKSKMVLARCEGHCSQSRSPELVFSFSTVLKQPFRSSCHCRRPQISK KLALRURCGSGMRLATTRYILSCHCEBCNS" /note="ORF2; Protein sequence is in conflict with the conceptual translation" /codon_start=1 protein_id="CAA46640.1" /db_xref="GI:133017" /translation="RIGCDAAGACDSLPLPTSTSSPTARNAPIEARCCVWILDGTVY RAVRPAERLAKELRKRMQFQFSISGKWWALIHRVRLSVFGARNGRYIFGK" ISFGSSPSDGGIPLGSDQCLGQFOQFSISGKWWALIHRVRLSVFGARNGRYIFGK"
RESULTS	4
HSCHR	
LOCUS	HSCHR
DEFINITION	H.sapiens DNA for ORF1 and ORF2 from chromosome X.
VERSION	X65724
KEYWORDS	X chromosome.
SOURCE	human.
ORGANISM	Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Homidae; Homo.	
REFERENCE	1 (bases 1 to 1872)
AUTHORS	Berger,W., Meindl,A., van de Pol,T.J., Cremer,F.P., Ropers,H.H., Doerner,C., Monaco,A., Bergen,R., Warburg,M. et.al.
TITLE	Isolation of a candidate gene for Norrie disease by positional cloning
JOURNAL	Nat. Genet. 1 (3), 199-203 (1992)
MEDLINE	93265103
REMARK	Erratum:[published erratum appears in Nat Genet 1992 Sep;2(1):84]
AUTHORS	2 (bases 1 to 1872)
TITLE	Berger,W.
JOURNAL	Direct Submission
FEATURES	Dept of Human Genetics, Geert Grootplein 20, P.O.Box 9101, 6500 HB Nijmegen, THE NETHERLANDS Location/Qualifiers
RESULTS	5
MNNDP	
LOCUS	MNNDP
DEFINITION	M.musculus ND P gene.
VERSION	X83794
KEYWORDS	NDP gene; Norrie disease locus.
SOURCE	house mouse.
ORGANISM	Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.	
REFERENCE	1 (bases 1 to 1769)
AUTHORS	Battinelli,E.M., Boyd,Y., Craig,I.W., Breakfield,X.O. and Chen,Z.Y.
TITLE	Characterization and mapping of the mouse Ndp (Norrie disease) locus (Nop)
JOURNAL	Mamm. Genome 7 (2), 93-97 (1996)
MEDLINE	96432457
REFERENCE	2 (bases 1 to 1769)
AUTHORS	Chen,Z.
TITLE	Direct Submission
JOURNAL	Submitted (08-APR-1992) W. Berger, University Hospital Nijmegen, Massachusetts General Hospital-East, Building 149, 13th Street, Charlestown, MA 02129, USA Location/Qualifiers